New avian observations from south-western Ethiopia, with a review of overlooked literature and altitudinal limits

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SUMMARY.—Observations are discussed that augment or amend data presented in the standard avifauna of Ethiopia (Ash & Atkins 2009) for the south-western corner of the country. Two species are detailed for the first time (Violet Wood-hoopoe *Phoeniculus damarensis,* Purple Indigobird *Vidua purpurascens*); the second certain localities for Barka Indigobird *V. larvaticola* and Wilson's Indigobird *V. wilsoni* are reported; and the specific status of Little Rush Warbler *Bradypterus baboecala* in Ethiopia is established. Other records include those relating to species previously unreported in October, and altitudinal limits that differ substantially from those presented by Ash & Atkins. We also detail a number of previously published records that were not reflected in the maps in Ash & Atkins. In Appendix 1 we list *c.*200 species / square records that are additional to those mapped by Ash & Atkins.

We spent a month in the field in south-western Ethiopia, between 10 October and 7 November 2014, at a time of year for which Ash & Atkins (2009) surprisingly often lacked observations. Thus field records are presented that augment or amend the work of Ash & Atkins. We also detail (Appendix 1) species / square records additional to those in their maps. Those authors do not quantify the thoroughness of their atlas coverage, so it is impossible to see where further field work is required; but among more than 200 additions there are in excess of 20 from the Uajo River square, between Sodo and Lake Abaya (0637D) alone. Some of our additions may reflect inaccurate plotting in Ash & Atkins' atlas: for example, in their gazetteer (p. 423) they gave coordinates for Turmi as 05°02'N, whereas they are correctly 04°58'N-thus the town and lodge of that name are in square 0436C and the Kaske River crossing in 0436D. Relevant literature records overlooked by Ash & Atkins are also listed. In addition, N. Redman (in litt. 2014) and N. Borrow (in litt. 2014) generously provided their own observations relevant to this paper. In the case of N. Borrow, his records had been submitted to J. Ash prior to the publication of Ash & Atkins, but most were unfortunately ignored therein. We also comment on some records in the literature relating to the areas we visited (Francis & Shirihai 1999, Tilahun et al. 2001, Spottiswoode et al. 2010) which we believe are in error or require confirmation.

Ash & Atkins numbered their atlas map squares independently of the more practical method of relating them to degrees of latitude and longitude (in this case squares of 30 × 30 minutes). In this paper we relate squares to their central point, thus square 0734B (Ash & Atkins' plot 79d, see their p. 63) is centred on 07°15'N, 34°45'E. Unless otherwise stated all observations are our own and relate to October–November 2014. Some observations were made in the company of M. N. Gabremichael and S. Rooke, and these are indicated as 'FD-L *et al.*'. Our itinerary included the Gibé escarpment, Sodo, Arba Minch (Nechisar National Park), south to Turmi and Murle (Omo River, Lake Dipa), north to Menagesha forest and Debre Libanos. This was followed by a circuit including the Jemma Valley, Rift Valley lakes, Bale Mountains National Park, Negele, Dawa River and Yabello to Mega. Appendix 2 is a gazetteer of all localities mentioned. Scientific names are those of Dickinson & Remsen (2013) and Dickinson & Christidis (2014), except where stated.

Results

BLACK-NECKED GREBE Podiceps uigricollis

One at Lake Dipa on 17 October and at least six on Lake Chamo (Nechisar National Park) on 13 October represent southern extensions of the range as mapped in Ash & Atkins, although the species had been reported from Nechisar by Safford *et al.* (1993).

EURASIAN SPOONBILL Platalea leucorodia

Ash & Atkins gave 27 October as the earliest date in autumn for Ethiopia; we saw an immature at Lake Dipa on 17 October (identified by its grey, not yellow, bill and lack of red on the face, thereby excluding African Spoonbill *P. alba*).

RÜPPELL'S GRIFFON Gyps rueppelli

Occurrence of the race *erlangeri* in north-east Ethiopia was considered likely by Ash & Atkins; Salvadori (1908) included Shoa in its range, and its type locality has been considered restricted to Shoa region, Ethiopia (e.g. Sclater 1924: 48).

OVAMBO SPARROWHAWK Accipiter ovampensis

We saw one on 14 October south of Turmi (square 0436D, 700 m) and one 16 October between Turmi and Murle (0536A, 580 m); Ash & Atkins plotted the latter square as requiring confirmation. The few previous records are for July and November–March, and above 1,270 m.

SOOTY FALCON Falco concolor

RJD identified a first-year bird that he observed closely, catching flying insects over Nechisar Plain, on 13 October. Ash & Atkins accepted just four records in Ethiopia, 28 October–30 January, but with further experience J. D. Atkins (*in litt.* 2015) is certain of one he saw in Awash National Park in October. N. Borrow (*in litt.* 2014) reported a juvenile in the Jemma Valley on 9–10 October 2000 and saw an adult at Yabello on 26 October 2004. October birds are presumably on passage to their non-breeding quarters in Madagascar and south-eastern Africa, as revealed by an adult satellite-tracked through eastern Ethiopia in early November, en route from the United Arab Emirates (Javed *et al.* 2012).

HARLEQUIN QUAIL Coturnix delegorguei

Two males were flushed together in grassland in Awash National Park (0940A), on 7 November (FD-L *et al.*). In the same area, N. Borrow (*in litt.* 2014) had many records of up to eight individuals between 13 October and 28 December (1994–2012), while two were seen there on 16 November 2013 (N. Redman *in litt.* 2014). Ash & Atkins reported records only for the period 10 February–17 August.

LITTLE BROWN BUSTARD Heterotetrax lnumilis

Listed for Mago National Park and Yabello Sanctuary by Tilahun *et al.* (1996, 2001), but these reports were clearly in error this far west and were not mentioned by Ash & Atkins.

WATER THICK-KNEE Burhinus vermiculatus

Reported from the road between Melka Ghebdu and Awash (*c*.09°13′N, 40°00′E) by Shirihai & Francis (1999), but as remarked by Spottiswoode *et al.* (2010) this is considerably to the north of other records in Ethiopia (to 06°N). It is visually difficult to separate from the widespread Senegal Thick-knee *B. senegalensis*, and presumably for that reason the record was not accepted by Ash & Atkins.

RAMERON PIGEON Columba arquatrix

Ash & Atkins reported records for all months except September and October. One was in desultory song in Menagesha forest on 20 October. In addition N. Borrow (*in litt.* 2014) recorded a few in October in five different years (1998–2006), in the Bale Mountains, at Wondo Genet and at Wadera.

LEVAILLANT'S CUCKOO Clamator levaillantii

Ash & Atkins knew of no record for October, and only two between 27 November and 23 March. However, we saw and heard birds on 11 October on the Gibé escarpment and daily 29–31 October in the Negele square (0539B). N. Borrow (*in litt*. 2014) had records for October (four), November (three), February (one) and March (one), in 1995–2012.

RED-CHESTED CUCKOO Cuculus solitarius

It would seem there were no records for September–October (Ash & Atkins), but on 16–17 October a bird was singing by the Omo River at Murle, and we saw and heard one at nearby Lake Dipa. A Red-capped Robin Chat *Cossyplia natalensis* imitated this cuckoo in Nechisar National Park (0537D), on 13 October.

YELLOWBILL Centhmochares aerens

Ash & Atkins accepted only five records that they considered certainly identified, from three localities (Nechisar National Park and surroundings). We heard its vocalisations (familiar to us from eastern Africa) on 12–13 October in the west of Nechisar National Park, but we did not encounter it in the Omo Valley. Ash & Atkins were uncertain as to the subspecies in Ethiopia, but based on vocalisations it is clearly *anstralis*. Of many uncertain localities in Ash & Atkins, Bishangari has since been confirmed (Spottiswoode *et al.* 2010; M. N. Gabremichael pers. comm.), and J. D. Atkins (*in litt.* 2015) considers that his records from Gore, Metu and Tepi should now be accepted too.

DONALDSON SMITH'S NIGHTJAR Caprimulgus donaldsoni

The lack of records in May and August–October, remarked on by Ash & Atkins, probably reflects insufficient field work. On 31 October we photographed one in woodland near Negele (0539B), and several were in song at Borana Lodge, Yabello, on 1 November (FD-L *et al.*).

BLUE-BREASTED KINGFISHER Halcyon malimbica

Listed from Mago National Park ('reputedly', Spottiswoode *et al.* 2010) and Omo National Park (Tilahun *et al.* 2001), but we did not find this vocal bird on the Omo, and nor did J. D. Atkins (*in litt.* 2014), during a week in July–August 1996 or M. N. Gabremichael (pers. comm.), thus it was not included by Ash & Atkins.

VIOLET WOOD-HOOPOE Phoeniculus damarensis

We found this species in two areas: at Murle, Omo River, where we had very good views of one on 16 October, and a large group at nearby Lake Dipa, on 17 October, with a pair (of which a poor photograph was obtained, Fig. 1) on the 'Little' Kaske River near Turmi, on 18 October. All birds clearly had a strong violet (not greenish) gloss, red bill and legs, and the voice sounded drier than that of Green Wood-hoopoe *P. purpureus*, which we know very well from elsewhere.

Ash & Atkins (2009: 222, 375) stated that the few claims of Violet Wood-hoopoe in Ethiopia (which they treated as a species distinct from *P. purpureus*, under the name *P. d. damarensis*, clearly a *lapsus* for *P. d. granti*) required confirmation. J. D. Atkins (*in litt.* 2014) has stated that he observed what he believed to be Violet Wood-hoopoe on three

occasions in large riverine trees near Lake Dipa in August 1996. Putative observations by the late J. Ash from the same general area of the lower Omo Valley were discussed by Ash & Atkins (2009: 375). Those authors were mistaken to suggest that Peters (1945: 251) cited Neumann (1903) as the source of records he listed from southern Ethiopia (Omo River, Lakes Stephanie and Rudolf), as Peters gave no reference for his statement and Neumann did not mention these localities. In fact, it was Zaphiro who collected two *Phoeniculus* in the Omo region—specimens in NHMUK (formerly BMNH) at Tring, examined by D. A. Turner (*in litt.* 2013). Although Ogilvie-Grant (1913) published on the passerines in that collection, the non-passerines were never documented in print. Zaphiro's birds were from the Zoula River, Uba, 12 July 1905; they are clearly not Black-billed Wood-hoopoes *P. somaliensis* (D. A. Turner *in litt.* 2013) and for the present we treat them as *P. damarensis granti.* This species has also been listed, without documentation, from Omo and Mago National Parks (Tilahun *et al.* 2001, Spottiswoode *et al.* 2010).

The plots in Ash & Atkins of *P. purpureus* range from *c*.11°15′N, 35°15′E south to *c*.07°15′N, 34°45′E (neither locality named). They also plotted eight records of *P. purpureus* which they considered required confirmation, and added that 'scattered birds may reach as far as 38°E'. In fact, Neumann (1905: 194) reported a specimen attributed to *P. purpureus niloticus*, with coral-red bill and legs, from Aveve, Kollu Province, and it is clear from his itinerary (Neumann 1904: 322) that this would have been in square 0938A.

Some authorities have suggested sympatry between various of these three species, but we believe this is unlikely to be the case and that further investigation is required. Two such claims were repeated by C. H. Fry *in* Snow (1978): one was based on the claim by Granvik (1934: 37–38) to have collected both *P. purpurens* (race *marwitzi*) and nominate *P. s. somaliensis* at Kolosia (or Kolothia), Turkana, Kenya, but Granvik made it clear that his specimen of *P. somaliensis* was immature, and the possibility of it being *P. purpureus* was not convincingly rejected. Similarly, Oberholser (1945: 87–88) reported specimens from Archer's Post, Kenya, of both *P. purpureus marwitzi* and *P. (damarensis) granti*. Zimmerman *et al.* (1996) considered that such claims required confirmation.

Concerning the distribution of *P. somaliensis*, we found it only as far west in the south as Yabello, and it is known from Nechisar National Park (Safford *et al.* 1993). J. D. Atkins (*in litt.* 2014) concurs that records of *P. somaliensis* in South Omo should be questioned.

VON DER DECKEN'S HORNBILL Tockus deckemi / **JACKSON'S HORNBILL** T. jacksoni

Treated as separate species by Ash & Atkins among others, but as conspecific by Dickinson & Remsen (2013) and Turner & Pearson (2014). An adult male observed closely by RJD on 15 October near the Kaske River (0436D, thus within the range of birds attributed to *T. jacksoni* as well as *T. deckeni*) had some obvious pale flecks on the wing-coverts and mantle, suggestive of possible hybridisation.

SCALY-THROATED HONEYGUIDE *Indicator variegatus*

The altitudinal range given by Ash & Atkins of 1,280–3,030 m does not appear to take into account records they mapped from the south-west (lower Omo), surely at a lower altitude (although they gave no details). We encountered it only at Bishangari, Lake Langano, a well-known site (N. Redman *in litt.* 2014), where a male was at its song perch at midday on 26 October (FD-L *et al.*).





Figure 1. Violet Wood-hoopoe *Phoeniculus damarensis*, Turmi, Ethiopia, October 2014 (R. J. Dowsett)

Figure 2. Male Grey-headed Batis *Batis orientalis*, Lake Langano, Ethiopia, February 2014 (© Dick Forsman)

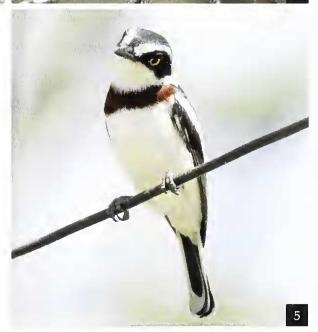
Figure 3. Female Grey-headed Batis *Batis orientalis*, Lake Langano, Ethiopia, February 2012 (© Dick Forsman)

Figure 4. Male Western Black-headed Batis *Batis erlangeri*, Awash National Park, Ethiopia, January 2010 (© Dick Forsman)

Figure 5. Female Western Black-headed Batis *Batis erlangeri*, Awash National Park, Ethiopia, November 2011 (© Dick Forsman)







PINK-BREASTED LARK Calendulauda poecilosterna

Ash & Atkins apparently knew of no records in July–December, but several were singing in dry bush between Turmi and Murle on 16 October. J. D. Atkins (*in litt.* 2015) had in fact recorded several in dry bush in August 1996, also between Turmi and Murle.

WHITE-TAILED SWALLOW Hirundo megaensis

The northernmost record of this very local endemic was given as $05^{\circ}12'N$, $38^{\circ}13'E$ by Ash & Atkins, although they mapped this as in square 0538C, thus north of $05^{\circ}30'N$. Mellanby *et al.* (2008) found birds north to $05^{\circ}08'N$, $38^{\circ}17'E$ in this sector, and further east Gabremichael *et al.* (2009) reported sightings around the Liben Plain ($c.05^{\circ}15'N$, $39^{\circ}46'E$). The northernmost plot in Ash & Atkins was misplaced (J. D. Atkins *in litt.* 2015).

COMMON REDSTART Phoenicurus phoenicurus

The race *samanisicus* is reportedly absent west of 38°E (Ash & Atkins), but a male was well seen on the Gibé escarpment on 11 October and M. Mills (*in litt*. 2015) saw a male there in April 2014.

SNOWY-CROWNED ROBIN CHAT Cossyplia niveicapilla

Several were singing in thickets at Lake Dipa on 17 October, an area in which there were also White-crowned Robin Chats *C. albicapillus*. This represents a southward extension of the known range in Ethiopia, from atlas square 0735A, although the species was listed without details from Mago National Park (Tilahun *et al.* 2001). Spottiswoode *et al.* (2010) also mentioned it from riparian thicket on the Gibé (= Omo) River in 0837B, an easterly extension of the known range. Ours is the first report for September–October (Ash & Atkins), although this is surely the result of insufficient field work during those months. For both species, Lake Dipa (at 400 m) lowers the known altitudinal limit (*cf.* Ash & Atkins), in the case of Snowy-crowned Robin Chat considerably so.

WHITE-BROWED ROBIN CHAT Cossyplia heuglini

Ash & Atkins did not detail the north-eastern limit of its range, which is Lake Langano (0738D): several were seen and heard in bush below the cliff at Simbo Lodge, on 3–4 November (FD-L *et al.*), and it is also known from Bishangari (N. Redman *in litt*. 2014).

LITTLE RUSH WARBLER Bradypterus baboecala

One was in song in the Awash Swamp at Bilen Lodge, on 6 November (FD-L *et al.*), a new locality for this sparsely distributed bird, but it had been heard there once before, by N. Borrow (*in litt.* 2014) on 10 October 2006. Its voice was similar to the low-pitched vocalisations of southern African populations, although it did not respond to playback of a voice recorded in South Africa (on Gibbon 1991). The species' low-pitched song was sound-recorded at Lake Awassa, where birds did react to playback of a South African recording (M. Mills *in litt.* 2015). These observations confirm those of Benson (1948: 66), who remarked on the fact that vocalisations from Ethiopia and southern Africa were strikingly different from the high-pitched songs of populations centred on west-central Kenya. Molecular analyses confirm the specific distinction between these two groups (Alström *et al.* 2011), for which priority insists the names be *B. baboecala* (type locality South Africa) and *B. centralis* (type locality Rwanda). Most Ethiopian birds are *B. b. abyssinicus*, with *B. b. sudanensis* reportedly the form in the Gambela area (Ash & Atkins).

ORPHEAN WARBLER Sylvia hortensis

Although specimens were reported from Gamo, Lake Abaya (0637B) and Gibé (Gibbe) River, Jimma (0837A) by Ogilvie-Grant (1913: 612), he called them in fact the 'Garden-

Warbler', this being the scientific name widely applied then to what is now *S. boriu*. Ash & Atkins made no reference to these, but correctly omitted them.

GREY-HEADED BATIS Batis orientalis / **WESTERN BLACK-HEADED BATIS** B. (minor) crlangeri

We would follow Louette (2005) in granting specific status to *B. erlangeri*. Because Ash & Atkins admitted the difficulty that is often attached to separation of this species from *B. orientalis*, we paid particular attention to the problem. The distinctive vocalisations provide the best means of field identification. We identified *B. erlangeri* in the following areas: Agere Maryam (0538C), Negele (0539B), Sodo and Uajo River (0637D), Awassa (0738A), Bishangari (0738D), Simbo Lodge, Lake Langano (0738D) and Gibé (0837B). It was absent from the drier woodlands in which we found *B. orientalis*, namely the road from Negele to the Genale River (0539B), between Yabello and Mega (0438A, C), Bilen Lodge and Awash National Park (0940A).

Confusion is possible in the field (*cf*. Figs. 2–5) and even specimens can be misidentified. We believe it remains to be proven that the broad range of overlap mapped by Ash & Atkins is indeed correct, despite those authors' optimism, and J. D. Atkins (*in litt*. 2015) now agrees. In particular, N. Borrow (*in litt*. 2014) and S. Rooke (pers. comm.) believe that all records of *B. orientalis* from the highlands are erroneous (we suggest it may not occur above 1,400 m).

BLACK-BELLIED SUNBIRD Cinnyris nectarinioides

Listed from Mago National Park by Tilahun *et al.* (2001), but this is a long way from its range in south-east Ethiopia and it was not mapped by Ash & Atkins as considered erroneous (J. D. Atkins *in litt.* 2015). Listed from Yabello by Spottiswoode *et al.* (2010), but the species was not found in that region by Benson (1946), and the western limit confirmed to date is the Dawa River (as mapped by Ash & Atkins). Uncommon there, but one seen on 1 November (FD-L *et al.*).

COPPER SUNBIRD Cinnyris cupreus

A male in breeding plumage at Lomi stream, Jemma Valley (0938D, 1,510 m), on 24 October, in which area the species was also reported by N. Borrow (*in litt.* 2014) and S. Rooke (pers. comm.). These confirm the Jemma Valley as the species' easternmost limit, Ash & Atkins having plotted an unconfirmed record in this square, without explanation.

YELLOW WHITE-EYE Zosterops senegalensis

Ash & Atkins plotted records for squares 0437D and 0438C, but these are in error, being based on specimens of the race *australoabyssinicus* collected near Yabello and Arero (Benson 1946: 454), a form now known to belong to Abyssinian White-eye *Z. abyssinicus* (R. E. Moreau *in* Paynter 1967: 327). However, FD-L saw *Z. senegalensis* (with bright yellow underparts, the local race *omocnsis* of *Z. abyssinicus* having a grey belly) in woodland near Murle (590 m), *c*.05°08′N, 36°13′E, on 16 October, an extension to the south-east.

NORTHERN PUFFBACK Dryoscopus gambensis

Ash & Atkins gave the altitudinal range as 480–1,880 m (once at 2,576 m), whereas we found it to be common in Menagesha forest at 2,450–2,600 m, on 20–21 October.

THREE-STREAKED TCHAGRA Tchagra jamesi

A pair and a single were observed displaying to each other in thornbush at Awash National Park, on 7 November (FD-L *et al.*); square 0840C is significantly further north than previously recorded (0740D in Ash & Atkins).

STRESEMANN'S BUSH CROW Zavattariornis stresemanni

Mellanby *et al.* (2008) found it north to nearly 05°08′N, 38°18′E, i.e. 22 km north of Yabello, a known area (N. Redman *in litt.* 2014). It was reported by Ash & Atkins north to an un-named locality 32 km north of Yabello (their square 109c, which they mistakenly plotted as 109d). We saw it no further north than 05°05′N, 38°16′E (one on 3 November, FD-L *et al.*), i.e. *c.*15 km north of Yabello.

LESSER BLUE-EARED STARLING Lamprotornis chloropterus

Clearly Greater Blue-eared Starling *L. chalybaeus* is much more widespread than this species, as shown by Ash & Atkins, *contra* Francis & Shirihai (1999). We found *chloropterus* at just four localities, and *chalybaeus* in well over 25.

MAGPIE STARLING Speculipastor bicolor

Ash & Atkins had records for every month except October and November. We found several pairs (at least eight birds) a few km before Murle and others at Murle, on 16–17 October: they were calling and occasionally chasing each other, possibly signs of early breeding activity. In addition, N. Redman (*in litt.* 2014) saw a pair on the Soda Plain on 27 November 2011, and N. Borrow (*in litt.* 2014) two in that area on 26 November 2012.

YELLOW-BACKED (BLACK-HEADED) WEAVER Ploceus melanocephalus

Francis & Shirihai (1999) reported this species from the Dawa River on 23 September 1997 (repeated by Spottiswoode *et al.* 2010), at a locality where Juba Weaver *P. dichrocephalus* is known. Although they realised this was unexpected (they did not find Juba Weaver), we consider the record unlikely and in need of confirmation. It was not mapped by Ash & Atkins. Juba Weaver is quite numerous and frequently seen in the region (e.g. 31 October and 1 November, FD-L *et al.*), but the nearest confirmed records of *P. melanocephalus* are of the race *fischeri* from the Imatongs in South Sudan (Nikolaus 1989), more than 500 km to the west.

BLACK-RUMPED WAXBILL Estrilda troglodytes

Records from Mago National Park and the Jemma Valley (Tilahun *et al.* 2001) are undocumented and unlikely to be correct; they were not accepted by Ash & Atkins (J. D. Atkins *in litt.* 2014). The nearest confirmed records are in the extreme west, from the Gambela area (Ash & Atkins).

VILLAGE INDIGOBIRD Vidua chalybeata

Several (their red legs well seen) with their known host, Red-billed Firefinch *Lagonosticta senegala*, on the Genale River, 25 km north-east of Negele (0539D), on 31 October (FD-L *et al.*) confirm this species' presence in the Negele area, *cf.* 'unconfirmed' records in Ash & Atkins. At present, this is the south-eastern limit in Ethiopia.

PURPLE (DUSKY) INDIGOBIRD Vidua purpurascens

On 19 October 2014 we found a male *Vidua* in breeding dress and in song, accompanied by a Jameson's Firefinch *Lagonosticta rhodopareia*, perched in the same small tree. This was in thornbush just north of the road crossing on the Uajo River, between Sodo and Lake Abaya. The brief snatches of song did not include mimicry and as plumage differences in indigobirds (other than Village) cannot be used for species separation in the field its identity is based tentatively on its close association with the known host. Jameson's Firefinch was identified on both visits to the area, south and north of the Uajo River—a pair on 12 October (calling, the typical trill), and a male (also calling) on 19 October. It was apparently the only firefinch present. Surprisingly no nest parasite has hitherto been reported in Ethiopia for



Figure 6. Male Wilson's Indigobird *Vidua wilsoni*, Gibé, Ethiopia, October 2014 (R. J. Dowsett) Figure 7. Male African Citril *Crithagra citrinelloides*, Debre Libanos, Ethiopia, October 2014 (R. J. Dowsett) Figure 8. Male Southern Citril *Crithagra hyposticta*, East Usambara Mountains, Tanzania, October 2009 (© Nik Borrow)

either this firefinch or African Firefinch *L. rubricata*, both of which are known from several localities, and *V. purpurascens* would be an addition to the Ethiopian avifauna. The nearest records are those in Kenya, at Kacheriba (Kacheliba), on the Kongelai escarpment (Payne 1973).

BARKA INDIGOBIRD Vidua larvaticola

Ash & Atkins detailed four records at three localities, but added that one of these may relate to Sudan, while the two from Gambela might have involved Fonio Indigobirds *V. camerunensis*. The one certain record (from Machigay, *c*.24 km south of Lake Tana) was attributed to *V. camerunensis* by Payne (1973: 333), where apparently listed also (as Madjingais) from Chad. This is perhaps the specimen attributed to Village Indigobird *V. chalybeata* ('Hypochera ultramarina ultramarina') by Cheesman & Sclater (1936: 194) from Dangila. This locality (also known as Dangla) is at 11°16′N, 36°50′E, whereas the coordinates for Machigay were given as *c*.11°25′N, 37°14′E by Ash & Atkins (and in error as 11°30′N, 37°40′E by Payne 1982). Cheesman's headquarters were at Dangila (Cheesman 1928), but reading Cheesman & Sclater (1935–36) it is clear that in October 1926 he travelled by mule from Dangila to Gondar, and the coordinates given by Ash & Atkins place Machigay on the road he would have taken (see also Cheesman & Sclater 1935: 300, 608).

To this record can be added our sighting of a male in breeding dress on the Gibé escarpment on 11 October. Its song included clear copies of the call notes of its known host, Black-faced Firefinch *Lagonosticta larvata*, which was present nearby. Also at Gibé, N. Redman (*in litt.* 2014) had a male in breeding dress respond to playback of the song of *L. larvata*, on 2 December 2011, while M. Mills (*in litt.* 2015) sound-recorded a non-breeding bird in song there in April 2014, which also mimicked Black-faced Firefinch.

WILSON'S INDIGOBIRD Vidua wilsoni

On 10 October near the old Gibé bridge a male in breeding dress was seen (Fig. 6), and its vocalisations included good imitations of the song of its known host Bar-breasted Firefinch

Lagonosticta rufopicta (the one certain way of identifying this indigobird in the field). Barbreasted Firefinch is frequently seen at this locality (M. Mills *in litt*. 2015). The only previous Ethiopian records involve specimens from Gambela (Ash & Atkins).

SOUTHERN CITRIL Crithagra hyposticta

Ash & Atkins accepted this species as occurring in seven squares, widely spread over the western half of the country. They thought that it might be a 'rare occasional vagrant', occurring in the same places as its sibling, the common African Citril *C. citriuelloides*. Notwithstanding the details presented by these authors (and through them S. L. Olson of the Smithsonian Institution), we believe the occurrence of a second, sympatric species of citril requires careful investigation. It has long been recognised that immature males of *C. citrinelloides* bear a very close resemblance to *C. hyposticta* (Ogilvie-Grant 1913: 579, when examining Ethiopian specimens). Figs. 7–8 show males of the two species. The known range of *C. hyposticta* reaches north to western Kenya and south-east South Sudan (race *brittoni*), while Dickinson & Christidis (2014) tentatively accept nominate *hyposticta* in western Ethiopia.

We found *C. citrinelloides* on many occasions, from Sululta Plain and Debre Libanos (0938B, D) south to Awassa (0738A) and Bale Mountains National Park (0639D), always including black-faced males, and never once did we hear the distinctive whistled calls of *C. hyposticta*, which we know well from Malaŵi and Zambia, and of which a good recording has been published by Stjernstedt (1996). The vocal descriptions given by Fry & Keith (2004) are confusing; only *frontalis* and *hyposticta* appear to give the call of 3–4 whistles (*cf.* Dowsett & Dowsett-Lemaire 1993)—we did not hear it in Ethiopia, and we know of no-one who has.

SALVADORI'S SEEDEATER Crithagra xautholaema

Several were seen on 30 October, some 36 km south-east of Negele (FD-L *et al*.). Ash & Atkins knew of no October record, but the species is probably resident.

NORTHERN STRIPE-BREASTED SEEDEATER Crithagra striatipectus

We found a male in full song in a large acacia at Kanta Lodge, Konso, on 14 October (1,430 m). This is a new atlas square and there was no previous record for October (although the species must surely be resident), according to Ash & Atkins, who listed it as *Setinus reichardi striatipectus*. It is a good split from *C. reichardi* (Dickinson & Christidis 2014), and the voice (a rich, trilling song) and ecology differ greatly from that of the miombo endemic *C. reichardi* of south-central Africa. The bird we observed closely presented no feature that might suggest the extralimital Streaky-headed Seedeater *C. gularis*, as suggested by Ash & Atkins, referring to what is now known as Northern (or Senegal) Streaky-headed Seedeater *C. canicapilla*, the nearest population of which is in western Kenya (Turner 2013).

Literature records overlooked by Ash & Atkins (2009)

The following published records did not appear on the maps in Ash & Atkins.

WHITE-CHEEKED TURACO *Tauraco leucotis*. 0637C: a specimen from Kullo on the Omo (Érard & Prévost 1991: 23).

NORTHERN WHITE-FACED OWL *Ptilopsis leucotis*. 0738B: Gambo, a type locality of the race *nigrovertex* (Erlanger 1904: 233).

PINK-BREASTED LARK *Calendulauda poecilosterua*. 0536B: collected on the Sagan River, north of Lake Stephanie (Ogilvie-Grant 1913).

TREE PIPIT *Anthus trivialis.* 0637D: a specimen from Baroda, Lake Abaya (Ogilvie-Grant 1913).

SPOTTED PALM THRUSH *Cichladusa guttata* and **WHITE-BROWED SCRUB ROBIN** *Cercotrichas leucophrys.* 0436B: records from Lake Stephanie (Ogilvie-Grant 1913).

RED-FACED CROMBEC *Sylvietta whytii.* 0436B and 0637D: based respectively on specimens from Lake Stephanie and Baroda, Lake Abaya (Ogilvie-Grant 1913).

NORTHERN CROMBEC *Sylvietta brachyura*. 0436B: Lake Stephanie (Ogilvie-Grant 1913).

SINGING CISTICOLA *Cisticola cantaus.* 0637C: a specimen from Kullo, Omo River (Lynes 1930: 357).

BORAN CISTICOLA *Cisticola bodessa*. 0536D: Bako (Baka) on the Uma River, Konta (Lynes 1930: 272).

TAWNY-FLANKED PRINIA Prinia subflava. 0637B: Loco, Lake Abaya (Friedmann 1937).

PALE PRINIA *Prinia somalica,* **YELLOW-BREASTED APALIS** *Apalis flavida* and **GREY FLYCATCHER** *Bradornis microrhynchus.* 0436B: Lake Stephanie (Ogilvie-Grant 1913).

SPOTTED FLYCATCHER *Muscicapa striata*. 0637D: Walamo (Ogilvie-Grant 1913); we found it in the same square on the Uajo River, on 12 October.

EASTERN VIOLET-BACKED SUNBIRD *Anthreptes orientalis.* 0637A: Gudji Mountains, Lake Abaya and Schambala River, Male Land (Neumann 1906).

SCARLET-CHESTED SUNBIRD *Chalcomitra senegalensis.* 0738D: Lake Zwai (Ogilvie-Grant 1913). It is indeed common in that square (e.g., Lake Langano, FD-L *et al.*).

SHINING SUNBIRD Cinnyris habessinicus. 0436B: Lake Stephanie (Ogilvie-Grant 1913).

BEAUTIFUL SUNBIRD *Cinnyris pulchellus.* 0436B: both Donaldson Smith and Zaphiro collected it at Lake Stephanie (Sharpe 1901, Ogilvie-Grant 1913).

EASTERN BLACK-HEADED ORIOLE Oriolus larvatus, **BRUBRU** Nilaus afer and **SHELLEY'S STARLING** Lamprotonis shelleyi. 0436B: Lake Stephanie (Ogilvie-Grant 1913).

BAGLAFECHT WEAVER *Ploceus baglafeclıt*. 0637C: a specimen from Kullo, Omo River (Ogilvie-Grant 1913).

VITELLINE MASKED WEAVER *Ploceus vitellinus* and **RED-CHEEKED CORDON-BLEU** *Uraeginthus bengalus.* 0436B: Lake Stephanie (Ogilvie-Grant 1913).

PURPLE GRENADIER *Granatina ianthinogaster*. Several squares are missing from the map in Ash & Atkins: 0436B and 0436C (respectively Lake Stephanie and northern Lake Rudolf: Ogilvie-Grant 1913); 0637D (Lake Abaya: Friedman 1937). We also found it in square 0436C, at Turmi.

BROWN-RUMPED CANARY *Crithagra tristriata* and **STREAKY SEEDEATER** *C. striolata.* 0637C: specimens from Kullo, Omo River (Ogilvie-Grant 1913).

SOMALI GOLDEN-BREASTED BUNTING *Fringillaria poliopleura*. 0436B: Lake Stephanie (Ogilvie-Grant 1913).

Altitudinal limits that amend those given by Ash & Atkins

Below, we list altitudinal limits that differ by more than 150 m (usually upslope) from those in Ash & Atkins (which are given in brackets); they are based on our observations, except where stated.

Somali Courser Cursorius somalensis (-1,000 m) 1,450 m (Soda Plain); Ring-necked Dove Streptopelia capicola (-1,530 m) 1,920 m (near Kulito); Blue-spotted Wood Dove Turtur afer (-1,820 m) 2,450 m (Debre Libanos); Donaldson Smith's Nightjar Caprimulgus donaldsoni (-1,370 m) 1,520 m (Negele) and 1,680 m (Yabello); Cinnamon-chested (Blue-breasted) Bee-eater Merops lafresnayii (-1,830 m) 2,380 m (Debre Libanos monastery); Yellow-fronted Tinkerbird Pogoniulus chrysoconus (-1,820 m) 2,450 m (Harenna forest and Menagesha); Nubian Woodpecker Campethera nubica (-2,120 m) 2,350 m (Debre Libanos monastery); Redfaced Cisticola Cisticola erythrops (-2,120 m) 2,400 m (Debre Libanos); Tawny-flanked Prinia Prinia subflava (above 750 m) 400 m (Lake Dipa); Grey-backed Camaroptera Camaroptera brachyura (-2,120 m) 2,380 m (Debre Libanos monastery); Brown Babbler Turdoides plebejus (above 700 m) 400 m (Lake Dipa); Spotted Creeper Salpornis salvadori (above 1,820 m) 1,660 m (Awassa); Grey-backed Fiscal Lanius excubitoroides (-2,000 m) 2,460 m (near Dodola); White Helmet-shrike Prionops plumatus (above 900 m) 400 m (Lake Dipa); Black-crowned Tchagra *Tchagra senegalus* (–2,000 m) 2,350 m (Jemma escarpment); Slate-coloured Boubou Laniarius funebris (above 910 m) 400 m (Lake Dipa); Black-headed Gonolek L. erythrogaster (above 700 m) 400 m (Lake Dipa; also collected on the lower Omo by Donaldson Smith, 22 December 1899: Sharpe 1901, see Donaldson Smith 1900 for his itinerary); Fork-tailed Drongo Dicrurus adsimilis (-1,820 m) 2,030 m (Weliso); Somali Crow Corvus edithae (-2,500 m) 3,120 m (Dinsho); Slender-billed Starling Onychognathus tenuirostris (1,820-3,700 m) 1,660 m (Awassa), 3,940 m (Sanetti Plateau); Snowy-crowned Robin Chat Cossyplia niveicapilla (above 750 m) 400 m (Lake Dipa); Spotted Palm Thrush Cichladusa guttata (-1,500 m) 1,680 m (Yabello); Lead-coloured Flycatcher Myioparus plumbeus (above 750 m) 400 m (Lake Dipa); Spectacled Weaver Ploceus ocularis (-1,890 m) c.2,300 m (Harenna Forest); Black-winged Bishop Euplectes hordeaceus (-1,240 m) 1,520 m (Lomi stream); Cinnamon-breasted Rock Bunting *Fringillaria tahapisi* (–1,990 m) 2,400 m (Jemma escarpment).

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References:

Alström, P., Fregin, S., Norman, J. A., Ericson, P. G. P., Christidis, L. & Olsson, U. 2011. Multilocus analysis of a taxonomically densely sampled dataset reveals extensive non-monophyly in the avian family Locustellidae. *Mol. Phyl. & Evol.* 58: 513–526.

Ash, J. & Atkins, J. 2009. Birds of Ethiopia & Eritrea: an atlas of distribution. Christopher Helm, London.

Benson, C. W. 1946. Notes on the birds of southern Abyssinia (part 6). Ibis 88: 444-461.

Benson, C. W. 1948. Geographical voice-variation in African birds. Ibis 90: 48–71.

Cheesman, R. E. 1928. The upper waters of the Blue Nile. *Geogr. J.* 71: 358–374.

Cheesman, R. E. & Sclater, W. L. 1936. On a collection of birds from north-western Abyssinia (part 4). *Ibis* (13)6: 163–197.

Dickinson, E. C. & Christidis, L. (eds.) 2014. *The Howard & Moore complete checklist of the birds of the world*, vol. 2. Fourth edn. Aves Press, Eastbourne.

Dickinson, E. C. & Remsen, J. V. (eds.) 2013. *The Howard & Moore complete cliecklist of the birds of the world,* vol. 1. Fourth edn. Aves Press, Eastbourne.

Donaldson Smith, A. 1900. An expedition between Lake Rudolf and the Nile. Geogr. J. 16: 600–624; 712 (map).

Dowsett, R. J. & Dowsett-Lemaire, F. 1993. Comments on the taxonomy of some Afrotropical bird species. *Tauraco Res. Rep.* 5: 323–389.

Érard, C. & Prévost, J. 1971. Notes on some Ethiopian birds. Bull. Brit. Oru. Cl. 91: 21-25.

Erlanger, C. von. 1904. Beiträge zur Vogelfauna Nordostafrikas. (Part 1). J. Orn. 52: 137–244.

- Francis, J. & Shirihai, H. 1999. Ethiopia. In search of endemic birds. Privately published, London.
- Friedmann, H. 1937. Birds collected by the Childs Frick Expedition to Ethiopia and Kenya Colony. Part 2. Passeres. *Bull. US Natl. Mus.* 153: 1–506.
- Fry, C. H. & Keith, S. (eds.) 2004. The birds of Africa, vol. 7. Christopher Helm, London.
- Gabremichael, M. N., Spottiswoode, C. N., Fishpool, L., Forsyth, E., Lewis, A., Pain, D., Thomas, R. & Toye, N. 2009. Occurrence of White-tailed Swallow *Hirundo megaensis* near Negele, Ethiopia. *Bull. Afr. Bird Cl.* 16: 83–86.
- Gibbon, G. 1991. Southern African bird sounds. Six cassettes. Southern African Birding, Hillary.
- Granvik, H. 1934. The ornithology of north western Kenya Colony, with special regard to the Suk and Turkana Districts. *Rev. Zool. Bot. Afr.* 25: 1–190.
- Javed, S., Douglas, D. C., Khan, S., Shah, J. N. & Hammadi, A. A. 2012. First description of autumn migration of Sooty Falcon *Falco concolor* from the United Arab Emirates to Madagascar using satellite telemetry. *Bird Conserv. Intern.* 22: 106–119.
- Louette, M. 2005. Western Black-headed Batis *Batis erlangeri*: a separate species consisting of two subspecies. *Bull. Afr. Bird Cl.* 12: 99–105.
- Lynes, H. 1930. Review of the genus Cisticola. Ibis (12)6 Suppl.: 1-673.
- Mellanby, R. J., Ross, B., Watt, A., Wondafrash, M., Ewnetu, M., Broadhurst, C., Critchlow, R., Dadesa, A., Deas, T., Enawgaw, C., Gebremedhin, B., Graham, E., Maclean, S., McKean, M., Collar, N. J. & Spottiswoode, C. N. 2008. Distribution, abundance and habitat preferences of White-tailed Swallow *Hirundo megaensis* and Ethiopian Bush-crow *Zavattariornis stresemanni*, two southern Ethiopian endemics. *Bird Conserv. Intern.* 18: 395–412.
- Neumann, O. 1903. Neue afrikanische Species und Subspecies. Orn. Monatsb. 11: 180–185.
- Neumann, O. 1904–05. Vögel von Schoa und Süd Äthiopien. J. Orn. 52: 321–410; 53: 184–243.
- Neumann, O. 1906. Vögel von Schoa und Süd Äthiopien. J. Orn. 54: 229–300.
- Nikolaus, G. 1989. Birds of South Sudan. Scopus Spec. Suppl. 3: 1–124.
- Oberholser, H. C. 1945. Birds of the White-Fuller Expedition to Kenya, East Africa. *Sci. Publ. Cleveland Mus.* 4(3): 43–122.
- Ogilvie-Grant, W. R. 1913. On a collection of birds from southern Abyssinia, presented to the British Museum by Mr. W. N. McMillan. *lbis* (10)1: 550–641.
- Payne, R. B. 1973. Behavior, mimetic songs and song dialects, and relationships of the parasitic indigobirds (*Vidua*) of Africa. *Orn. Monogr.* 11: 1–333.
- Payne, R. B. 1982. Species limits in the indigobirds (Ploceidae, Vidua) of West Africa: mouth mimicry, song mimicry, and a description of new species. Misc. Publ. Mus. Zool., Univ. Michigan 162: 1–96.
- Paynter, R. A. (ed.) 1967. Check-list of birds of the world, vol. 12. Mus. Comp. Zool., Cambridge, MA.
- Peters, J. L. 1945. Check-list of birds of the world, vol. 5. Mus. Comp. Zool., Cambridge, MA.
- Safford, R. J., Duckworth, J. W., Evans, M. I., Telfer, M. G., Timmins, R. J. & Zewdie, C. 1993. The birds of Nechisar National Park, Ethiopia. *Scopus* 16: 61–80.
- Salvadori, T. 1908. Gyps erlangeri, nov. sp. Boll. Mus. Zool. Anat. Comp. Torino 23(576): 1-6.
- Sclater, W. L. 1924. Systema Avium Æthiopicarum, vol. 1. British Ornithologists' Union, London.
- Sharpe, R. B. 1901. On the collection of birds made by Dr. A. Donaldson Smith on his last expedition to Lake Rudolf and the Nile. *Proc. Zool. Soc. Lond.* 1901: 602–622.
- Snow, D. W. (ed.) 1978. An atlas of speciation in African non-passerine birds. Brit. Mus. (Nat. Hist.), London.
- Spottiswoode, C., Gabremichael, M. N. & Francis, J. 2010. Where to watch birds in Ethiopia. Christopher Helm, London.
- Stjernstedt, R. 1996. Rare birds of Zambia. Cassette. Privately published, Livingstone.
- Tilahun, S., Edwards S. & Egziabher T. B. G. (eds.) 1996. *Important Birds Areas of Ethiopia. A first inventory*. Ethiopian Wildlife and Natural History Society, Addis Ababa.
- Tilahun, S., Edwards, S. & Egziabher, T. B. G. 2001. Ethiopia. Pp. 291–336 *in* Fishpool L. D. C. & Evans M. I. (eds.) *Important Bird Areas in Africa and associated islands: priority sites for conservation*. Pisces Publications, Newbury & BirdLife International, Cambridge, UK.
- Turner, D. A. 2013. Comments concerning two sympatric seedeaters *Poliospiza* spp. in northwestern Kenya. *Scopus* 32: 49–51.
- Turner, D. A. & Pearson, D. J. 2014. Systematic and taxonomic issues concerning some East African bird species, notably those where treatment varies between authors. *Scopus* 34: 1–23.
- Zimmerman, D. A., Turner, D. A. & Pearson, D. J. 1996. *Birds of Kenya and northern Tanzania*. Christopher Helm, London.

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Appendix 1

Additions to the species atlas maps in Ash & Atkins (2009), based on records in 2014. An asterisk (*) denotes confirmation of a square record plotted as uncertain by Ash & Atkins.

Black-necked Grebe Podiceps nigricollis 0536A, 0537D; Squacco Heron Ardeola ralloides 0538C, 0539B; Cattle Egret Bubulcus ibis 0539B; Intermediate Egret Ardea intermedia 0539B; Black-headed Heron A. melanocephala 0739A; Hamerkop Scopus umbretta 0536A; Yellow-billed Stork Mycteria ibis 0439C; Eurasian Spoonbill Platalea leucorodia 0536A; African Black Duck Anas sparsa 0938D; Northern Shoveler Spatula clypeata 0539B; African Fish Eagle Haliaeetus vocifer 0637D; Black-breasted Snake Eagle Circaetus pectoralis 0539B, 0639B; Brown Snake Eagle C. cinereus 0438C; Western Marsh Harrier Circus aeruginosus 0539B, 0639C; Pallid Harrier C. macrourus 0537A; Montagu's Harrier C. pygargus 0639D*; Gabar Goshawk Micronisus gabar 0538C; Ovambo Sparrowhawk Accipiter ovampensis 0436D, 0536A*; African Goshawk A. tachiro 0536A; Common Buzzard Buteo 0438A, 0536A; Verreaux's Eagle Aquila verreauxii 0739A; Martial Eagle Polemaetus bellicosus 0436C; African Pygmy Falcon Polihierax semitorquatus 0537C; Grey Kestrel Falco ardosiaceus 0438C, 0539B; Eurasian Hobby F. subbuteo 0438A; Sooty Falcon F. concolor 0537D; Lanner Falcon F. biarmicus 0539D; Common Quail Coturnix coturnix 0738B; Red-knobbed Coot Fulica cristata 0539B; Common Crane Grus grus 0738D; Collared Pratincole Glareola pratincola 0539B; Three-banded Plover Charadrius tricollaris 0739A; Spur-winged Lapwing Vanellus spinosus 0539B; Green Sandpiper Tringa ochropus 0539B; White-winged Black Tern Chlidonias leucopterus 0539B; Blackfaced Sandgrouse Pterocles decoratus 0438B; Speckled Pigeon Columba guinea 0436C, 0536A; White-collared Pigeon C. albitorques 0838B; Lemon Dove Aplopelia larvata 0738D; Dusky Turtle Dove Streptopelia lugens 0837B; Emerald-spotted Wood Dove Turtur chalcospilos 0637D; Bruce's Green Pigeon Treron waalia 0539B; Orangebellied Parrot Poicephalus rufiventris 0637D; Levaillant's Cuckoo Clamator levaillantii 0539B; Common Cuckoo Cuculus canorus 0536A*; Klaas's Cuckoo Chrysococcyx klaas 0539B; White-browed Coucal Centropus superciliosus 0637D; Barn Owl Tyto alba 0938D; African Scops Owl Otus senegalensis 0436D; Northern White-faced Owl Ptilopsis leucotis 0436D; Cape Eagle Owl Bubo capensis 0739A; Long-eared Owl Asio otus (abyssinicus) 0838D; Donaldson Smith's Nightjar Caprimulgus donaldsoni 0539B; Plain Nightjar C. inornatus 0438C; Common Swift Apus apus 0438A; Woodland Kingfisher Halcyon senegalensis 0537C; Blue-cheeked Bee-eater Merops persicus 0837B; European Bee-eater M. apiaster 0436D, 0438A, 0537A, 0737B, 0738C; European Roller Coracias garrulus 0738A; Lilac-breasted Roller C. caudatus 0436C; Violet Wood-hoopoe Phoeniculus damarensis 0436C, 0536A; Black Scimitarbill Rhinopomastus aterrimus 0436D, 0536B; Hoopoe Upupa epops 0438A; Hemprich's Hornbill Tockus hemprichii 0837B; Yellow-fronted Tinkerbird Pogoniulus chrysoconus 0938D; Red-fronted Barbet Tricluolaema diademata 0536A; Black-billed Barbet Lybius guifsobalito 0436D; Red-and-yellow Barbet Trachyphonus erythrocephalus 0539B; D'Arnaud's Barbet T. darnaudii 0539B; Greater Honeyguide Indicator indicator 0539B, 0637D; Lesser Honeyguide I. minor 0536A, 0637D; Singing Bush Lark Mirafra cantillans 0536A; Fawn-coloured (Foxy) Lark Calendulauda africanoides (alopex) 0539B; Common Sand Martin Riparia riparia 0539B, 0837B; African Rock Martin Ptyonoprogne fuligula 0539D; Wire-tailed Swallow Hirundo smithii 0537A; Common House Martin Delichon urbicum 0539B; Yellow Wagtail Motacilla flava 0536B; Grassland Pipit Anthus cinnamomeus 0539B; Tree Pipit A. trivialis 0439C; Abyssinian Longclaw Macronyx flavicollis 0738B; White-breasted Cuckoo-shrike Ceblepyris pectoralis 0436D; Northern Brownbul Phyllastrephus strepitans 0539B; African Thrush Turdus pelios 0436D; Bare-eyed Thrush T. tephronotus 0539B; Sprosser Luscinia luscinia 0837B; Snowy-crowned Robin Chat Cossypha niveicapilla 0536A; White-browed Robin Chat C. heuglini 0738D; Spotted Palm Thrush Cichladusa guttata 0439C, 0637D; White-browed Scrub Robin Cercotriclus leucophrys 0438B, 0637D; Pied Wheater Oenanthe pleschanka 0438B; Black-eared Wheatear O. hispanica 0438A; Isabelline Wheater O. isabellina 0537D; Little Rush Warbler Bradypterus baboecala 0940A; Marsh Warbler Acroceplialus palustris 0837B; Great Reed Warbler A. arundinaceus 0738A; Icterine Warbler Hippolais icterina 0738D*; Red-faced Crombec Sylvietta wlıytii 0436D; Banded Parisoma Sylvia boelimi 0438B; Rattling Cisticola Cisticola cliiniana 0438B, 0637D; Boran Cisticola C. bodessa 0536B; Red-faced Cisticola C. erythrops 0537A; Singing Cisticola C. cantans 0639D, 0837D, 0838A; Tawny-flanked Prinia Prinia subflava 0537C, 0637D, 0838A; Red-fronted Warbler P. rufifrons 0536A*; Grev-backed Camaroptera Camaroptera brachyura 0436D; Northern Black Flycatcher Melaenornis edolioides 0438A; Spotted Flycatcher Muscicapa striata 0536A, 0637D; Lead-coloured Flycatcher Myioparus plumbeus 0637D; Pygmy Batis Batis perkeo 0439C; Common Wattle-eye Platysteira cyanea 0837D; Northern Grey Tit Melaniparus tluruppi 0438B, 0536A; Eastern Violet-backed Sunbird Anthreptes orientalis 0637D; Collared Sunbird Hedydipna collaris 0637D; Scarlet-chested Sunbird Chalcomitra senegalensis 0738D; Variable Sunbird Cinnyris venustus 0539B, 0838A; Marico Sunbird C. mariquensis 0637D; Copper Sunbird C. cupreus 0938D*; Tacazze Sunbird Nectarinia tacazze 0639C; Abyssinian White-eye Zosterops abyssinicus 0539B, 0637B; Yellow White-eye Z. senegalensis 0536A; Eastern Black-headed Oriole Oriolus larvatus 0438A, 0840C; Redbacked Shrike Lanius collurio 0637D; Isabelline Shrike L. isabellinus 0439C; Great Grey Shrike L. excubitor 0539B, 0637D; Grey-backed Fiscal L. excubitoroides 0639C; Brubru Nilaus afer 0837B; Three-streaked Tchagra Tchagra jamesi 0840C; Slate-coloured Boubou Laniarius funebris 0438B, 0637D; Sulphur-breasted Bushshrike Chlorophoneus sulfureopectus 0637D, 0837B; Grey-headed Bushshrike Malaconotus blanchoti 0438B, 0637D, 0837B; Stresemann's Bush-crow Zavattariornis stresemanni 0438A, 0538A; Pied Crow Corvus albus 0436C; Bristle-crowned Starling Onychognathus salvadorii 0539B; Lesser Blue-eared Starling Lamprotornis chloropterus 0436C; Yellow-spotted Petronia Gymnoris pyrgita 0436D; Baglafecht Weaver Ploceus baglafecht 0838A; Blacknecked Weaver *P. nigricollis* 0536B; Lesser Masked Weaver *P. intermedius* 0439C; Rüppell's Weaver *P. galbula* 0838A; Red-headed Weaver *Anaplectes rubriceps* 0438B, 0637D; Red-billed Quelea *Quelea quelea* 0439C, 0539B; Green-winged Pytilia *Pytilia melba* 0436C, 0738D; Jameson's Firefinch *Lagonosticta rhodopareia* 0637D; Red-cheeked Cordon-bleu *Uraeginthus bengalus* 0436C; Purple Grenadier *Granatina ianthinogaster* 0436C, 0637D; Grey-headed Silverbill *Euodice griseicapilla* 0536B; Cut-throat Finch *Amadina fasciata* 0439C; Village Indigobird *Vidua chalybeata* 0539D; Purple Indigobird *V. purpurascens* 0637D; Barka Indigobird *V. larvaticola* 0837B; Wilson's Indigobird *V. wilsoni* 0837B; Eastern Paradise Widow *V. paradisaea* 0439C; Brown-rumped Seedeater *Crithagra tristriata* 0639C; Northern Stripe-breasted Seedeater *C. striatipectus* 0537A.

Appendix 2

Gazetteer of localities mentioned in the text, with the 30-minute square to which we allocate it in Ethiopia (and in brackets the square numbers used by Ash & Atkins). Coordinates and altitudes (the latter given to the nearest 10 m) have, where possible, been confirmed personally by a GPS reading.

Locality Agene Maryam	Coordinates 05°38′N, 38°14′E	Square 0538C (109a)	Altitud e (m) 1,860
Agere Maryam Archer's Post, <i>Kenya</i>	00°39'N, 37°41'E	0336C(109a)	1,000
Arero, Sidamo	04°42′N, 38°45′E	0438D (120b)	1,360
	04 42 IN, 38 45 E	0438D (120b)	1,500
Aveve, Kollu Province	@ 08°51'N, 40°01'E	0938A (58c) 0840C (71a)	910
Awash Gorge, Awash National Park Baroda, poar Lako Abaya	06°32′N, 37°46′E		1,400
Baroda, near Lake Abaya Bilan Lodgo, Awash National Bark		0637D (96b)	730
Bilen Lodge, Awash National Park Bichangari, Laka Langaria	09°28'N, 40°19'E 07°22'N 28°48'E	0940A (60c)	
Bishangari, Lake Langano Dancila	07°32′N, 38°48′E	0738D (83b)	1,600
Dangila Dawa Biyar	11°16'N, 36°50'E	1136B (38d)	2,100
Dawa River Dahra Libanca (Ethio Corman Park Hotal)	04°52'N, 39°19'E	0439C (121a)	740
Debre Libanos (Ethio-German Park Hotel)	09°44′N, 38°49′E	0938D (58b)	2,490
Debre Libanos Monastery Director (Courie)	09°43′N, 38°51′E	0938D (58b)	2,380
Dinsho (Gurie)	07°06'N, 39°47'E	0739B (84d)	3,100
Dodola	06°59'N, 39°11'E	0639C (98a)	2,460
Gambela	08°08'N, 34°34'E	0834B (65d)	450
Gambo	07°26′N, 38°52′E	0738B (83d)	2,290
Gamo, near Lake Abaya	<i>c</i> .06°20′N, 37°30′E	0637B (96d)	000
Genale River	05°30'N, 39°43'E	0539B (110d)	880
Gibé River, Jimma		0837A (68c)	4.450
Gibé bridge (old)	08°14′N, 37°35′E	0837B (68d)	1,170
Gibé escarpment	@ 08°16'N, 37°37'E	0837B (68d)	1,430
Goba	07°01′N, 39°59′E	0739B (84d)	2,650
Gondar (Gonder)	12°36′N, 37°30′E	1237C (29a)	2,260
Gore	08°09'N, 35°32'E	0835B (66d)	
Gudji Mountains, Lake Abaya	06°14′N, 37°23′E	0637A (96c)	2,300–3,300
Harenna forest, Bale Mountains	@ 06°45′N, 39°43′E	0639D (98b)	2,540
Jemma escarpment	@ 09°50'N, 38°53'E	0938D (58b)	2,360
Jemma Valley	@ 09°55′N, 38°55′E	0938D (58b)	1,350
Kacheriba, Kongelai 'scarp, <i>Kenya</i>	01°29'N, 35°01'E		
Kanta Lodge, Konso	05°20'N, 37°27'E	0537A (108c)	1,430
Kaske River near Turmi	04°58'N, 36°31'E	0436D (118b)	860
Kolosia (or Kolothia), Turkana, <i>Kenya</i>	01°38′N, 35°46′E		
Kulito	07°19'N, 38°05'E	0738A (83c)	1,780
Kullo on the lower Omo	06°39'N, 37°10'E	0637C (96a)	660
Lake Abiata (Abiata-Shalla National Park)	07°39′N, 38°38′E	0738D (83b)	1,530
Lake Awassa	07°03′N, 38°26′E	0738A (83c)	1,660
Lake Chamo	05°56'N, 37°32'E	0537D (108b)	1,090
Lake Dipa	05°10′N, 36°12′E	0536A (107c)	400
Lake Langano	@ 07°32'N, 38°48'E	0738D (83b)	1,600
Lake Zwai	07°56′N, 38°43′E	0738D (83b)	1,640
Liben Plain	@ 05°16'N, 39°41'E	0539B (110d)	1,580
'Little' Kaske River near Turmi	04°58′N, 36°29′E	0436C (118a)	930
Loco, Lake Abaya	06°20'N, 37°55'E	0637B (96d)	1,180
Lomi stream	09°57'N, 38°54'E	0938D (58b)	1,510
Machigay	<i>c</i> .11°25′N, 37°14′E	1137A (39c)	2,050
Mago National Park		0536A,C (107c,a)	
Mega	04°03'N, 38°19'E	0438A (120c)	1,650
Melka Ghebdu	09°34'N, 39°50'E	0939D (59b)	
Menagesha forest	08°58'N, 38°32'E	0838D (69b)	2,450-2,850
Metu	08°18'N, 35°35'E	0835B (66d)	

Murle Lodge, Omo River Nechisar Plain, Nechisar National Park Negele	05°10′N, 36°12′E @ 05°53′N, 37°39′E 05°20′N, 39°35′E	0536A (107c) 0537D (108b) 0539B (110d)	430 1,230 1,520
Sagan River, north of Lake Stephanie	<i>c</i> .05°10′N, 36°50′E	0536B (107d)	-, • - •
Sanetti Plateau area	<i>c</i> .06°55′N, 39°55′E	0639D (98b)	3,100-4,000
Schambala River, Male Land	<i>c</i> .06°30′N, 37°12′E	0637A (96c)	1 550
Simbo Lodge, Lake Langano	07°33′N, 38°41′E	0738D (83b)	1,570
Soda Plain south-east of Yabello	c.04°10′N, 38°17′E	0438A (120c)	1,520
Sodo	06°52′N, 37°46′E	0637D (96b)	2,000
Sululta Plain	<i>c</i> .09°20′N, 38°45′E	0938B (58d)	2,570
Tepi	07°12′N, 35°25′E	0735A (80c)	
Turmi Lodge and town	04°58′N, 36°29′E	0436C (118a)	930
Uajo River, south of Sodo	06°34′N, 37°49′E	0637D (96b)	1,260
Uma River, Konta	<i>c</i> .05°47′N, 36°34′E	0536D (107b)	
Walamo	06°50'N, 37°40'E	0637D (96b)	1,900
Wadera	05°45′N, 39°19′E	0539C (110a)	1,760
Weliso (Wolisso)	08°32′N, 37°59′E	0837D (68b)	2,030
Weyto	05°22'N, 36°59'E	0536B (107d)	580
Wondo Genet	07°04'N, 38°39'E	0738B (83d)	1,760
Yabello (Borana Lodge)	04°51′N, 38°10′E	0438C (120a)	1,680
Zoula River, Uba	<i>c</i> .06°09′N, 36°53′E	0636B (95d)	, -